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(54) DIMENSION MEASUREMENT METHOD AND APPARATUS BY IMAGE PROCESSING

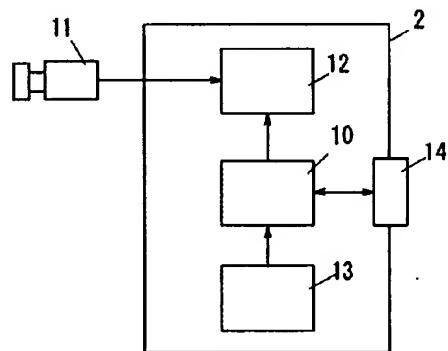
(57) Abstract:

PROBLEM TO BE SOLVED: To accurately obtain dimensions of an inspection object even in the case where a rotary displacement to a reference position has occurred in an inspection object within an image the same as the case where no rotary displacement has occurred.

SOLUTION: An image-inputting apparatus 11 picks up the image of a work, and stores the image of the work in the image memory 12 of an image-processing apparatus 2. In the image stored in the image memory 12, a position detection region is set at the both ends of the straight line section to be inspected that is the image of the work. One point on the edge to be inspected is extracted in each position detection region, and an inclination angle to be inspected is obtained from two coordinates. The angular difference between the inclination angle to be inspected of the reference and the inclination angle to be inspected for measuring dimensions becomes the amount of rotary displacement. A virtual straight line that is inclined by

the amount of rotary displacement to a direction for measuring dimensions is set to the inspection target of the reference, and target dimensions are obtained using distance when the inspection target is projected onto the virtual straight line.

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2 画像処理装置
1 1 画像入力装置
1 2 画像メモリ